## Aquatics Transplant Program

One planting of bushy pondweed (Najas) was made June 29,1964 in the Little Lake. The stock was taken from Horseshoe Lake. To all appearances the planting was unsuccessful; however, checks will be made in the coming years to see if the seeds or roots survived.

Two plantings of watershield (Brasenia) were made around Lake Wapanocca and one of the ponds this year. The stock for both of the plantings were taken from Clay Pool, a famed duck hunting spot near Harrisburg.

Arkansas. Both of the transplants were made in July.

The first planting of watershield (Brasenia) was made July 14,1964.

The plantings fared as follows:

- 1. Two plantings were made in the willows on the lake edge near Willow Pole and one planting was made between the cypress on the entrance to the Flyway. All three of these plantings lasted on the average of about five days. On the fifth day all the leaves and stems had disappeared. Later on the area where they were planted was checked for the presence of root stocks; root stocks could not be found. This does not mean that the plants may not appear in later years, seeds or root stocks may still be present and capable of producing plants.
- 2. Another planting was made in Long Pond. This planting lasted from July 14,1964 until September 15,1964; when it was checked and no leaves or stems were present. It is very possible that root stocks from this planting are still alive and will grow later on. Checks will be made in the future to verify this statement.

The second planting took place July 24,1964. It involved more plants and planting sites. The stands fared as follows:

- 1. Stands were planted at the entrance to Long Fond; outside of
  Willow Pole where the two previous stands had failed; in the cove
  where the entrance to Willow Pole is situated; on the Flyway
  where the previous stands had failed; and on the lake edge near Cross
  Arms. All of these plantings disappeared about six days after they
  had been planted. A check was made afterwards for the root
  stocks, and no root stocks could be found. There still is the possibility
  that there are some root stocks or seeds present, so these areas
  will have to be checked in later years.
- 2. Another planting was made near the success ful planting in Long Pond. It is still going strong now. It is highly possible that this planting will appear next year, since its roots are in good condition; however, it did not flower this year.

None of the aquatics transplanted last year were found this year; however, checks are to be made in the future to make sure that these plants have not survived.

The aquatics transplant program appeared to be successful, since this is the first year that aquatics transplanted on Wapanocca have managed to grow the first year. There is always a chance that the other plantings of this year and those from last year will grow, so a close watch will have to be kept on the areas where these plantings were made.

## Vegetation Status of Ponds

Due to the low water level of the lake this Spring, water from Big Creek was let in to bring the water level up during the spring high water period. This practice had been carried out in varying degrees every spring and had had no noticable detrimental effect on the existing growth of aquatics in Wapanocca. However, this year very little countail showed up. Countail was the most abundant aquatic on Wapanocca last year. It is felt that the water from Big Creek had some effect on the growth of countail in Wapanocca.

The water conditions were a little better this year than they were last year. In June of 1964 the average water gauge reading was 1.67 feetland the total rainfall for the month was 2.05 inches; while in June of 1963 the average water gauge reading was 1.51 feet and the total rainfall for the month was 3.65 inches. In July of 1964 the average water gauge reading was 1.38 feet and the total rainfall for the month was 2.60 inches; while in July of 1963 the average water gauge reading 1.14 feet and the total rainfall for the month was 2.45 inches. In August of 1964 the average water gauge reading was 1.38 feet and the total rainfall for the month was 7.75 inches; while in August of 1963 the average water gauge reading was .60 feet and the total rainfall for the month was 1.00 inches.

Soil samples were taken on the Big Lake, Little Lake, Prices, Cross Arms, Barneys Hole, and Willow Pole. The results were as follows:

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- 1. The Big Lake's pH was 6.2; the organic matter content was moderate; the Phosphoric Oxide content was high; the Potassium content was high; the Calcium content was high; and the Phosphorus content was high. There were no water samples taken this year, but the pH of the water samples taken last summer ranged from 8.8 to 9.4 as opposed to a pH of the soil of 6.2.
- 2. Prices pH was 5.1; the organic matter content was high the Phosphoric Oxide content was high; the Potassium content was high; the Calcium content was high; and the Phosphorus content was high. There were no water samples taken this year, but the pH of last summers water samples ranged from 7.1 to 7.5 as opposed to the pH of the soil of 5.1.
- 3. The Little Lakes' pH was 5.3; the organic matter content was high; the Phosphoric Oxide content was high; the Potassium content was high; and the Phosphorus content was high. There were no water samples taken this year, but the pH of last summers water samples ranged from 7.2 to 8.8 as opposed to the pH of the soil of 5.3.
- 4. Cross Arms' pH was 5.3; the organic matter content was high; the Phosphoric Oxide content was high; the Potassium content was high; the Calcium content was high; and the Phosphorus content was high.
- 5. Barneys Hole's pH was 5.4; the organic matter content was high; the Phosphoric Oxide content was high; the Potassium content was high; the Calcium content was high; and the Phosphorus

content was high.

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6. Willow Pole's pH was 5.8; the organic matter content was high; the Phosphoric Oxide content was high; the Potassium content was high; the Calcium content was high; and the Phosphorus content was high. There were no water samples taken this year, but the pH of the water sample taken last summer was 8.8 as opposed to the pH of the soil of 5.8.

Prices depth varied from two to three feet this summer.

The pond was covered with duckweed. There was no coontail found in this pond this year.

The depth of Little Lake varied from three to four feet this summer. There were no aquatics growing in the Little Lake. as was the case last year.

Cross Arms depth varied from one and one-half to two feet this summer. It was covered with duckweed. No parts of lotus plants were observed floating on Cross Arms this summer as they were last summer. Coontail was found here in late July, but it was very widely spread and hard to find.

Barney's Hole's depth varied from one and one-half to two feet this summer. The pond was covered with duckweed and no coontail could be found.

The Big Lake's depth varied from three to four feet this summer.

There were no aquatics growing here, as was the case last year.

Long Pond's depth varied from one and one-half to two feet in depth. It was covered withduckweed. There were no coontail growing

in Long Pond this year.

Round Pond's depth varied from one and one-half to two feet this summer. It too was covered with duckweed. There was no coontail growing in Round Pond this year.

Treadwell's depth varied from one to two feet this summer. It was covered with lotus. This is the first time since Wapanocca had become a refuge that anyone had been in Treadwell, so the lotus may have existed last year or even earlier than that. There was no coontail growing in Treadwell this year.

Willow Pole had one to one and one-half feet of water in it this summer. There was a very thick stand of Najes, but the coontail was not as thick as it was last year. Cutgrass and river bulrush were present as they were last year, plus cattail was present.

Optimum water conditions of two to three inches existed in the Black Duck Hole this year. Arrowhead, mud plantain, and cattail were just as abundant as they were last year. Lotus was found growing in the Black Duck Hole this year.

The Flyway again had some arrowhead growing on it as it did last year. Mud plantain appeared on it this year.